

What is claimed is:

1 1. A method for facilitating secure handoff in a network having at least first and
2 second wireless base stations and a least one wireless mobile terminal, the method
3 comprising the steps of:

4 receiving a request from said at least one wireless mobile terminal for a handoff
5 from said first base station to said second base station; and
6 transferring security information from said first base station to said second base
7 station in response to said request.

1 2. The invention as defined in claim 1 further wherein said security information
2 includes a set including at least a random number, an authenticator derivable by said
3 wireless mobile terminal but not said first or second base stations, and a key.

1 3. The invention as defined in claim 1 further wherein at least a portion of said
2 security information is used to validate said at least one mobile wireless terminal to said
3 second base station.

1 4. The invention as defined in claim 1 further wherein said security information
2 transferred from said first base station to said second base station in response to said
3 request is less than all of the security information received by said first base station.

1 5. The invention as defined in claim 4 wherein all of the security information
2 received by said first base station was received from a wireless mobile terminal validation
3 system.

1 6. The invention as defined in claim 4 wherein all of the security information
2 received by said first base station was received from a third base station.

1 7. The invention as defined in claim 1 wherein said transferring security
2 information from said first base station to said second base station in response to said
3 request is performed only when said first base station knows said second base station
4 prior to said receiving step.

1 8. The invention as defined in claim 1 further comprising the step of initiating an
2 encrypted link between said second base station and said wireless terminal when said first
3 base station and said wireless terminal were communicating using an encrypted link, said
4 second base station using said security information transferred from said first base station
5 to said second base station in initiating said encrypted link between said second base
6 station and said wireless terminal.

1 9. A method for performing handoffs in a network for providing wireless
2 communication service having at least first and second wireless base stations and a least
3 one wireless terminal, the method comprising the steps of:

4 transmitting a request, from said wireless terminal for a handoff between said first
5 base station to said second base station;

6 receiving a response at said wireless terminal when said second base station
7 knows said first base station prior to receiving said request indicating that said second
8 base station can engage in facilitated handoffs with said first base station; and

9 connecting said wireless terminal for user traffic to said second base station.

1 10. The invention as defined in claim 9 wherein said facilitated handoff employs
2 information about said wireless terminal transferred from said first base station to second
3 base station.

1 11. The invention as defined in claim 10 wherein said information is security
2 information.

1 12. The invention as defined in claim 10 wherein said information is security
2 information received from a security center.

1 13. The invention as defined in claim 10 wherein said information is security
2 information received from a base station other than said first or second base stations.

1 14. The invention as defined in claim 10 wherein said information is security
2 information and includes at least one from the set consisting of: (i) a password, (ii) a
3 challenge-response pair, and (iii) a challenge-response cipher key tuple.

1 15. The invention as defined in claim 10 wherein said information is security
2 information that is received over a network for inter base station communication.

1 16. The invention as defined in claim 10 wherein said connecting step further
2 includes the step of

3 initiating an encrypted link between said second base station and said wireless
4 terminal when said first base station and said wireless terminal were communicating
5 using an encrypted link prior to said handoff request, said second base station using
6 security information transferred from said first base station to said second base station as
7 part of said response in initiating said encrypted link between said second base station
8 and said wireless terminal.

1 17. A method for performing handoffs in a network having at least first and
2 second wireless base stations and a least one wireless terminal, the method comprising
3 the steps of:

4 transmitting a request, from said wireless terminal for a handoff between said first
5 base station to said second base station;

6 when said second base station does not know said first base station prior to
7 receiving said request, receiving at said wireless terminal an indication that it must
8 connect to said second base station without benefit of information supplied from said first
9 base station.

10 18. The invention as defined in claim 17 wherein said information is security
11 information.

12 19. The invention as defined in claim 17 wherein said information is security
13 information received from a security center.

1 20. The invention as defined in claim 17 wherein said information is security
2 information received from a base station other than said first or second base stations.

1 21. A method for performing a handoff in a wireless network having at least first
2 and second base stations and a least one wireless terminal, the method comprising the
3 steps of:

4 receiving a request, by said second base station, from said wireless terminal for a
5 handoff between said first base station to said second base station;

6 performing an expedited handoff when second base station knows said first base
7 station prior to receiving said request; and

8 performing a nonexpedited handoff when second base station does not know said
9 first base station prior to receiving said request.

1 22. The invention as defined in claim 21 wherein said step of performing an
2 expedited handoff includes the step of transferring security information from said first
3 base station to said second base station.